PROSTAGE
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Remote WahWah
Users Manual

Firmware Version 1.51
As at 16th December 2015

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1 Introduction

Dear Customer

Thank you for purchasing the Prostage Remote WahWah. This effect device has been designed to allow you to remotely control the WahWah effect or the volume using a MIDI expression pedal. The device has no controls, but is completely controlled via MIDI.

The Remote WahWah allows you to process the entire guitar signal in the rack. At the front edge of the stage, all you need is a MIDI foot controller with expression pedal, but no more effect pedals. Stompboxes can be integrated into your rack using the Prostage XDS loop system. You need several meters of guitar cable less and the associated sound and dynamic losses are omitted.

The Remote WahWah consists of a pure analog audio circuit. You can control the WahWah effect and various parameters that affect the sound of the WahWah via MIDI. Further, you can save presets with different WahWah sounds.

1.2 Remote WahWah Features

- WahWah
- Volume control (VCA)
- Level booster up to 31dB
- Contour booster
- Treble booster
- Pure analog audio circuit (using Fasel coil)
- Controlled via MIDI
- Compatible with all MIDI expression pedals
- A voltage-controlled circuit, called a VCA, fulfills the task of the potentiometer. The VCA is controlled remotely via MIDI.
- Auto Wah function with tap tempo
- Auto Enable function
- MIDI controlled parameters: WahWah effect, Lin or Log response curve, Input & Output gain, frequency range of the WahWah movement, Q-factor, coil-damping, Contour Boost frequency, Bypass
- Easy creation of presets using the System Manager software on your Mac or PC. (XDS | XLS looper | switcher or XTMpro adaptor required).
- 128 presets (different sounds) can be saved in memory.
- Input impedance: 1 Mega Ohm
- Output impedance: 470 Ohm

1.3 The Prostage System

Prostage stands for professional live-equipment. The different units are to be regarded as a coherent system, all of which are configured using the System Manager software. If the Remote WahWah is connected to a Prostage XDS | XLS | XTMpro, presets can be created very easily using the System Manager software.

If you have any questions, or if something does not work as you expect, please do not hesitate to contact us: info@prostage.eu. Your questions will also help us to improve this users manual.

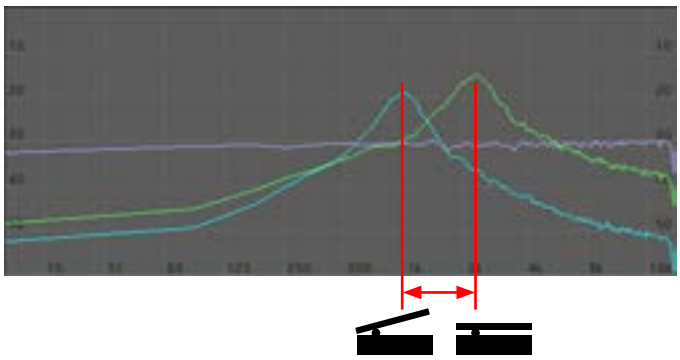
The Prostage team wish you lots of fun with the new Remote WahWah and big success in your musical career.

Lukas Truninger
Founder & Developer

1.3 What exactly is the Prostage Remote WahWah?

The Prostage Remote WahWah is a real WahWah designed with a fully analog signal path. The effect is generated using an original Fasel coil. The Remote WahWah uses a so-called VCA instead of the potentiometer. In simple terms, this is a potentiometer that can be controlled remotely via MIDI.

The WahWah effect is a filter, which raises the mids and lowers the bass and treble. The special effect is achieved by shifting up and down the frequency of the resonance peak.



Input Signal

WahWah Effect (Filter)

The Prostage Remote WahWah not only allows you to control the WahWah effect, but it also lets you adjust all the important values - so called parameters - that affect the sound of the WahWah. The parameters are further explained in chapter 7.2.2. You can, for example, make a preset with an original Cry Baby, another preset with the XY Signature Wah, and so on.

The device can also be used as a volume pedal as well as a Level, Contour and Treble booster.

1.4 Avoiding Hum Problems

The Remote WahWah can be installed anywhere in the rack (also at the rear) using the mounting lugs. But, it must be mounted as far away as possible from fat power transformers. So, for example, do not fit it directly on top of the amplifier. The power transformers generate a magnetic field that is picked up by the fasel coil in the WahWah and, thus, can lead to hum. The closer the WahWah is located to the transformer, the more it hums. It can help to turn the WahWah on the spot as the magnetic fields have a direction.

Also, the supplied power adapter must not be placed next to the WahWah. We recommend you to fix the WahWah on one side of the rack, and the power distribution and power supply of the WahWah on the opposite side. For more hints on building the rack, please refer to our “Ultimate Guitar Rig Building Guide”, which is available free for download on our website:

www.prostage.eu/guitar-rig-building.html

2 Terminology

2.1 MIDI - WTF is that???

MIDI stands for "Music Instrument Digital Interface". MIDI is the global standard for transmitting notes and control commands to and from all kinds of electronic instruments and sound-processing equipment.

You can connect your Remote WahWah and use the basic functions directly, without having to deal with MIDI. All you have to do is to configure your expression pedal so that it sends CC number 7. You can find more information about this in the users manual of your foot controller. And, of course, you've got to connect the Remote WahWah to the foot controller with a MIDI cable (see chapter 3.2). To activate the effect, you have to select a preset number higher than "1" (The first preset is "Bypass" by factory default).

If you own a Prostage XDS | XLS | XTMpro, you can program the Remote WahWah very easily using the System Manager software. No MIDI knowledge is required to do this.

But you can also program the Remote WahWah without the XDS | XLS | XTMpro. Then, you need a MIDI interface and a sequencer software that can send Sysex data. For this, MIDI knowledge is necessary. Detailed information about MIDI can be found on www.midi.org and many other sites on the internet.

2.2 Expression Pedal

An expression pedal is a kind of volume pedal that is connected to a MIDI foot controller (or which is part of the foot controller). However, the expression pedal does not control a guitar signal, but generates MIDI commands (Continuous Controller), with which for example the volume, the WahWah effect or other adjustable values of the Remote WahWah can be controled.

2.3 Instant Access = On/Off Switches (Stompbox Mode)

Instant Access are "hardwired" on/off switches. These work like an analog footswitch connected directly to your amplifier, e.g. to switch channels. At the foot controller you can, for example, define a button which switches the WahWah on and off.

2.4 Preset | Program Change

Presets are stored settings in the effects unit. You can recall presets using the switches on the foot controller. For this purpose, a program number is selected on the foot controller. This is known as a Program Change.

A preset contains all the settings of the Remote WahWah belonging to one sound. For example, the following presets are stored:

- Preset 2 => Standard CryBaby Sound
- Preset 3 => XY Signature Wah
- Preset 4 => Volume Control

If you now press button 2 on the foot controller, the adjustable values - so-called parameters - are set within the Remote WahWah so that the sound corresponds to the CryBaby.

If you press button 3, the parameters are changed as they have been stored for the XY Signature Wah.

In Preset 4 the WahWah switches its operating mode and works as a volume pedal.

2.5 Control Change | CC = > Real-time control with an Expression Pedal (e.g. Volume)

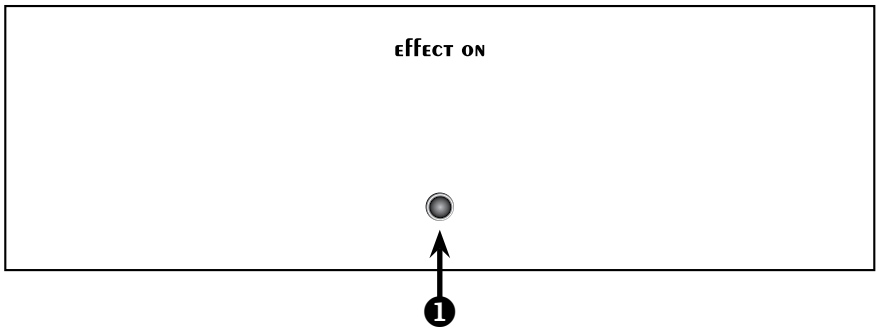
The abbreviation CC stands for MIDI "Control Change". Control Changes are commands, with which parameters (eg volume) are controlled in real time. To this end, an expression pedal sends - as long as it is moved - so called Continuous Controller and tells the effects device its position. Control Changes can also switch functions at the receiver device on and off.

2.6 Bypass | Hard-Bypass

Bypass means that the signal is passed from the input jack of an effect device directly to its output. The effect is thus bypassed, ie it is off. With a hard-bypass, this is done with a relay. That is as whether the jacks are soldered directly to each other. The Prostage Remote WahWah uses such a hard-bypass.

There are also devices that control the bypass electronically. In this case, at least one electronic component (an input amplifier) will always remain in the signal path. Thus, the guitar signal will be affected even if the effect is off.

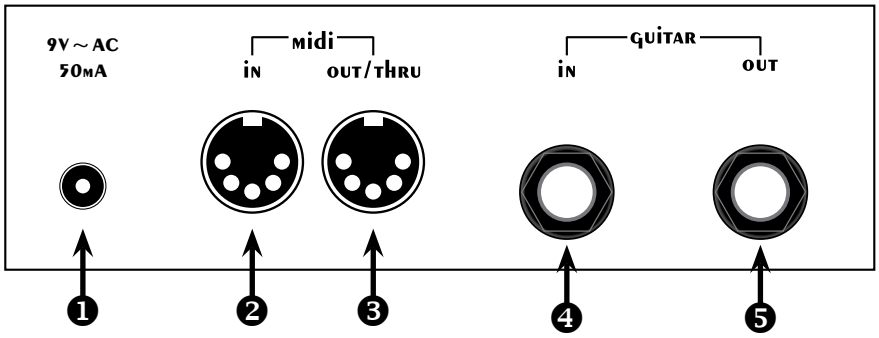
3.1 The Front Panel



❶ Effect On LED

This LED illuminates when the effect is turned on. Important: This is not a "Power" LED indicating that the device has power. If the effect is bypassed, this LED does not light even if the Remote WahWah is powered.

3.2 The Rear Panel



❶ Power Connector

The Remote WahWah must be powered necessarily using a **9V~AC** (alternating current) power supply. The Remote WahWah will not work with direct current (DC). Higher voltages can destroy the WahWah.

❷ MIDI In

Connect the [MIDI In] of the Remote WahWah using a MIDI cable to the [MIDI Out] of the foot controller or the [MIDI Out] of the Prostage XDS | XLS | XTMpro. If several MIDI effect devices are used, the [MIDI In] from the Remote WahWah can be connected to the MIDI [Thru] of another device in your MIDI chain.

❸ MIDI Out/Thru

The [MIDI Out/Thru] of the Remote WahWah is set as MIDI "Thru" ex works. This means that all data arriving at the MIDI Input will be forwarded. On [MIDI Thru], you can connect e.g. a multi-effects device or a MIDI-capable guitar amp.

❹ Guitar In

Connect your Guitar to the [Guitar In] using a jack cable.

❺ Guitar Out

Connect the [Guitar Out] to your guitar amplifier using a jack cable.

4 Using the Remote WahWah

The Remote WahWah can be controlled by any standard MIDI foot controller with expression pedal. The expression pedal must send Control Change no. 7 (Volume). When using a Prostage foot controller, we recommend to use the setting "Hi Res" instead of Control Change no. 7, since the resolution of the expression pedal is, thus, eight times higher.

The Remote WahWah receives ex-works on all MIDI channels (Omni).

4.1 Basic Functions of the Remote WahWah

The MIDI expression pedal either controls the WahWah effect or the volume, depending on the selected preset. Further, all adjustable values - so called parameters - can be controlled by MIDI Control Change commands (see chapter 11.1 for a CC list.)

The Remote WahWah can store up to 128 presets. They are recalled by MIDI Program Change commands. Ex-works, the following presets are stored:

0.	Bypass	(Effect is off)
1.	Cry Wah	(Original Cry Baby WahWah)
2.	Low Wah	(As preset 1, but with a lower frequency of the effect)
3.	Contour Wah	(As preset 1, but with an additional Contour boost at 1.5 kHz)
4.	Auto Wah Sine	(As preset 1, but with the Auto Wah function, regularly in and decongestant)
5.	Auto Wah Peak	(As preset 1, but with the Auto Wah function, pulsating effect)
6.	Treble Boost	(Treble boost by 10dB; effect without pedal control)
7.	Volume Boost	(10dB boost, which is controlled with the pedal, e.g. for solos)
8.	Volume Reduction	(10 dB down, controlled by the pedal, e.g. for parts with less distortion)
9.	Volume	(Normal volume pedal, from mute to unity gain)
10.	Mute	(The Remote WahWahs volume is -100dB)

IMPORTANT => After powering on, the Remote WahWah is at preset "0". This is a "Bypass" program ex-works. Thus, the effect is turned off. To activate the WahWah, you need to recall another preset first!

4.2 Switching the WahWah On and Off

There are various ways to turn the WahWah on and off :

- **Preset Change**

  You can define different presets. Among others, you can also store a "Bypass" preset. If you recall the "Bypass" preset, the effect turns off. If you recall another preset where the WahWah is active, it switches on.

- **Instant Access Switch | Control Change Command**

  If you are using an expression pedal with a switch (e.g. the Misson Engineering SP-1), you can switch the WahWah on and off using this switch. The switch must send Control Change (CC) 74.

  Of course, you can also assign CC 74 to a switch of the foot controller and thus switch the WahWah on and off using a permanently assigned switch of the foot controller.

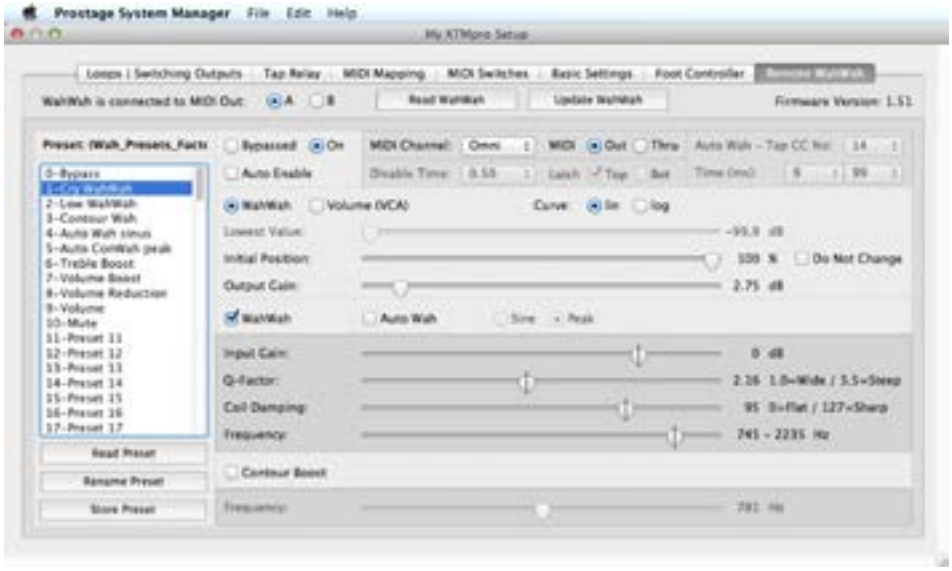
- **Automatic On and Off**

  The Remote WahWah offers an [▣Auto Enable] function. If this is activated, the WahWah turns on automatically as soon as the expression pedal is moved. After an adjustable period in which the expression pedal is not moved, the WahWah switches off again. Or it stays on until a new preset is recalled .

  If, in addition, the function [Latch ▣Top] or [Latch ▣Bot] is enabled, the WahWah only switches on or off when the expression pedal reaches its top position, respectively, the bottom. So this works like a virtual switch.

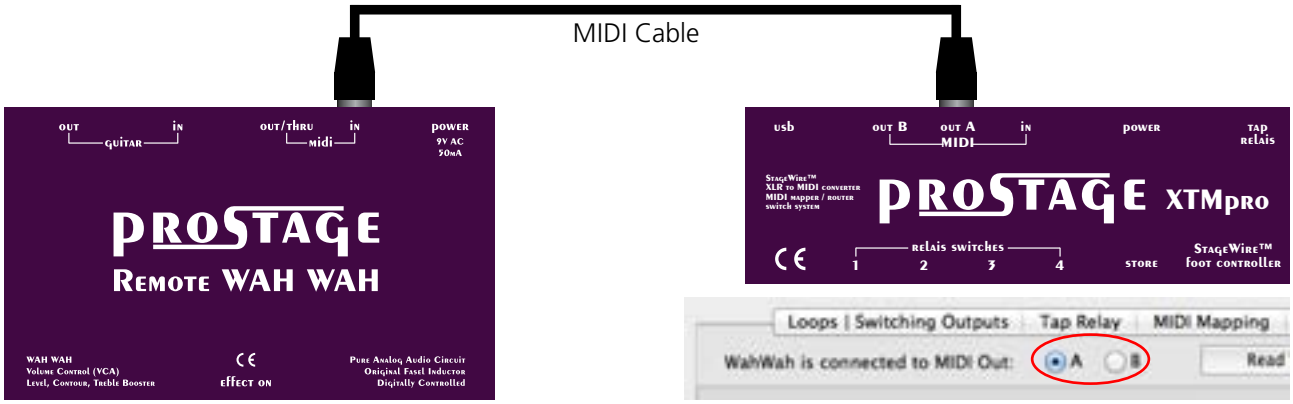
5 Creating Presets Using the Prostage System Manager Software

The Prostage System Manager software (available as free download on the Prostage website) is the user's interface for configuring the Prostage system. The software provides a tab for the Remote WahWah, which allows you to create presets very easily. Therefore, a XDS | XLS | XTMpro is required. It is used as MIDI interface and is the heart of every Prostage system.

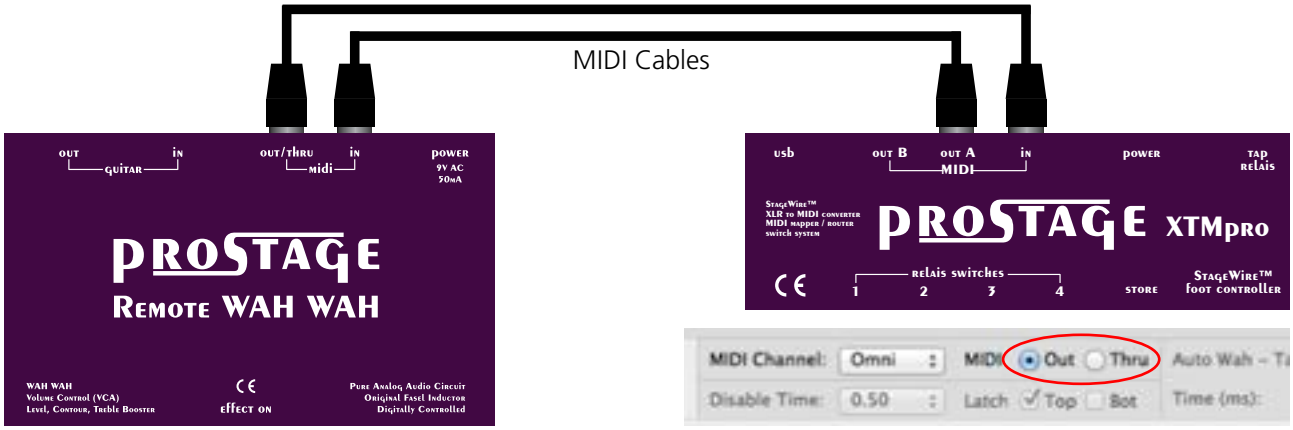


5.1 Connecting the Remote WahWah to the XDS | XLS | XTMpro

In order that the System Manager software can communicate with the Remote WahWah, it must be connected to the XDS | XLS | XTMpro via MIDI. Connect [MIDI Out A] or [MIDI Out B] from the XDS | XLS | XTMpro to the [MIDI In] of the Remote WahWah. In the System Manager window in the upper left you have to specify which MIDI Out you are using [WahWah is connected to MIDI Out ⦿A ⦿B].



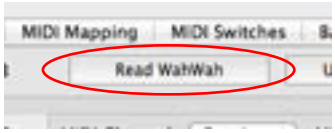
In order to also read the settings of the WahWah, another MIDI cable is required from the [MIDI Out/Thru] of the Remote WahWah to the [MIDI In] of the XDS | XLS | XTMpro. In the System Manager window, [MIDI ⦿Out ⦿Thru] has to be set to „⦿Out".



5.2 Reading the Settings of the WahWah

IMPORTANT => The Remote WahWah is not automatically synchronized with the System Manager software. Inside the System Manager and the WahWah, different presets may be stored. To view in the System Manager software the presets stored in the WahWah, you have to read out the WahWah first by clicking on the button [Read WahWah]. All 128 presets and the global/basic settings are read.

Using the button [Read Preset], it is also possible to read an individual preset.



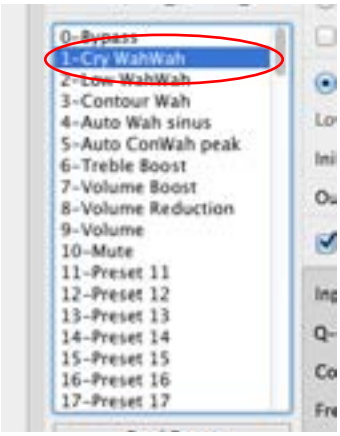
IMPORTANT => The preset names are not stored in the Remote WahWah. Thus, when reading the Remote WahWah no preset names are read. The names are only stored on the local hard drive. See chapter 5.6 for more information.

NOTE => You can also edit all parameters without reading the WahWah. In this case, you need only one MIDI cable from the XDS | XLS | XTMpro [MIDI Out] to the WahWah [MIDI In]. But be aware that the settings on the display do not necessarily correspond to the settings in the Remote WahWah.

5.3 Recalling Presets

When calling up presets, you have to consider the following:

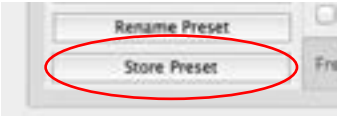
If a preset is recalled via the foot controller (StageWire or [MIDI In] of the XDS | XLS | XTMpro), the Remote Wah-Wah loads the locally stored preset in the WahWah and the corresponding preset within the System Manager window will be selected. If the Remote WahWah has not previously been read out, the screen displays the settings stored in the computer - not the settings that are stored in the WahWah.



The presets can also be selected via the preset list on the left side of the System Manager window. In this case, the software will send all settings to the WahWah as shown on the screen. This means that the preset inside the WahWah will be overwritten temporarily. If you want to save the settings permanently, it must be stored by clicking the [Store Preset] button.

5.4 Adjusting and Store the Settings in the Remote WahWah

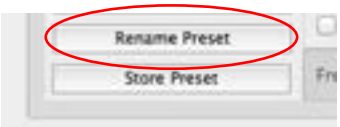
You can adjust all the parameters of the Remote WahWah (see chapter 7) using the sliders and knobs in the System Manager software. You can create 128 individual presets.



To store the changes permanently to the preset, click the [Store Preset] button. Otherwise they will be lost on preset change.

IMPORTANT => Storing a preset will always save the settings that are currently set inside the Remote WahWah (that is what you hear). When you store a preset, no settings will be sent from the System Manager to the Remote WahWah.

5.5 Renaming Presets



Presets can be renamed using the button [Rename Preset]. However, the preset names are only stored to the hard disk. They are not stored in the Remote WahWah. Thus, when reading out the WahWah, no preset names are read and the "old" preset names will remain on the screen.

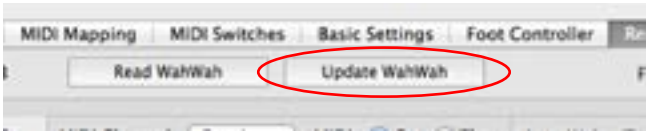
5.6 Saving the Settings to the Local Hard Disk

The complete settings of the Remote WahWah can be saved to the local hard disk. This makes sense e.g. if you play in two different bands using two different setups. With [File] => [Save WahWah Presets], the configuration is stored to the hard disk.

IMPORTANT => Do not forget to read out the Remote WahWah first (see chapter 5.2) in order to store the correct settings on your local hard disk.

5.7 Reading the Settings from Local Hard Disk

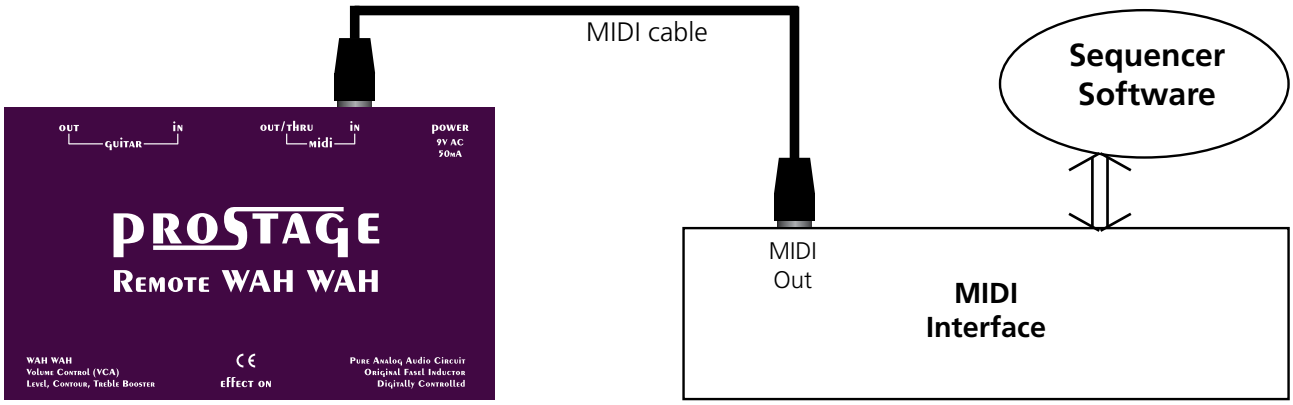
[File] => [Open WahWah Presets] will open the WahWah settings stored on the hard disk (file extension .pwf). The data is loaded into the System Manager window only.



In order to also send all the settings to the WahWah, you have to click the button [Update WahWah]. This will overwrite all the presets and the basic settings inside the Remote WahWah using the settings from the System Manager.

6 Creating Presets with a Sequencer Software

The presets of the Remote WahWah can be edited using a sequencer software. Of course, a MIDI interface must be available too and MIDI knowledge is required.



6.1 Controling the Parameters using Control Change Commands

The following CC (Control Change) commands are used to adjust the parameters (more on the parameters in chapter 7):

CC 07 (0-127) WahWah effect (operating mode [⦿WahWah]), or volume (operating mode [⦿Volume])
CC 89 (0-127) Lowest Value (in operating mode [⦿Volume]; -100dB ... 0dB) *
CC 90 (0-127) WahWah Input Gain (-15 dB ... +4 dB)
CC 91 (0-127) WahWah Q Factor (Wide ... Steep)
CC 92 (0-127) WahWah Coil Rating (Flat ... Sharp)
CC 93 (0-127) WahWah Frequency (162 / 486 Hz ... 2,2 / 6,6 kHz)
CC 94 (0-127) Contour Boost Frequency (450 Hz ... 3,4 kHz)
CC 95 (0-127) Output Gain (0 dB ... +31 dB)

* In the operation mode [⦿WahWah], CC 89 controls the Auto Wah:
Value 0 = Auto Wah disabled
Value 1 = Auto Wah with the [⦿Sine] curve
Value 2 = Auto Wah with the [⦿Peak] curve

CC 14 (off/on) "Tap" (factory default is CC14. However, this value can be modified using Sysex commands)
CC 72 (off/on) "Do Not Change" Initial Position, disabled / enabled
CC 73 (off/on) "Curve" linear / logarithmic
CC 74 (off/on) "Bypass" effect off / on
CC 75 (off/on) "WahWah / VCA" operating mode
CC 76 (off/on) "WahWah" disabled / enabled
CC 78 (off/on) "Contour Boost" disabled / enabled
CC 79 (off/on) "Auto Enable" disabled / enabled

For CC 14 and 72 to 79, the controller values are 0 = off, 127 = on.

NOTE => Depending on the active functions, not all the parameters affect the sound.

6.2 Saving Presets and Changing the Basic Settings using Sysex Commands

IMPORTANT => In the commands listed below, XX | YY stands for a hexadecimal value each. Values from 00 up to 7F (= 127) are permitted. Higher values are not allowed.

- **Save the current settings:**

F0 00 20 75 00 7F F7 => Store to the current preset number
F0 00 20 75 00 7F XX F7 => Store to a specific preset number, where XX = preset number

- **MIDI channel and MIDI Out/Thru assignment**

F0 00 20 75 00 70 XY F7 Y => 0-F = MIDI channel (0 = channel 1, F = channel 16);
X => 0 => MIDI receive channel = Y, MIDI Out/Thru = Out
1 => MIDI receive channel = Omni, MIDI Out/Thru = Out
2 => MIDI receive channel = Y, MIDI Out/Thru = Thru
4 => MIDI receive channel = Omni, MIDI Out/Thru = Thru

- **Auto WahWah Speed**

F0 00 20 75 00 76 XX F7
F0 00 20 75 00 77 YY F7 Auto WahWah speed (Time in ms = 2 * XXYY)
Warning: The entry is made in HEX! E.g. "0100" corresponds to binary 128, and the resulting time is therefore 2 * 128 = 256 ms)

- **Auto Enable Latch Funktion**

F0 00 20 75 00 70 XY F7 Y => 0 = Latch function disabled
5 = Latch Top
A = Latch Bottom
F = Latch Top & Bottom
X => 0-7 = Latch tolerance (from firmware version 1.51):
0 = Latch at CC7 value 0 or 127, 7 = Latch already at CC7 value 7 or 120

- **Auto WahWah Disable Time**

F0 00 20 75 00 72 XX F7 Auto Disable Time (Time in ms = (20 * XX) + 80)
From firmware version 1.51:
XX = 7F: The WahWah does not switch off automatically

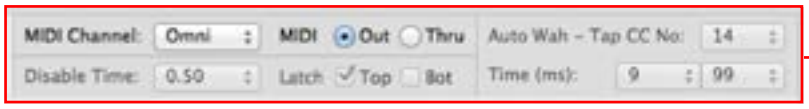
- **Tap CC Number**

F0 00 20 75 00 75 XX F7 Tap CC No (XX = CC No.)

In the following, we explain all adjustable values (so called parameters) of the Remote WahWah based on the System Manager software. These parameters can also be adjusted with MIDI CC and Sysex commands (see chapter 6).

7.1 Global Parameters

The parameters on the darker background in the upper right corner of the System Manager window are global. This means that they apply to all presets. All other parameters are individual for each preset. The global parameters are immediately stored in the Remote WahWah, without having to click [Update WahWah] or [Store Preset].



MIDI Channel | MIDI Out Thru

[MIDI Channel] selects the MIDI receive channel of the Remote WahWah. "Omni" means that the WahWah receives on all MIDI channels, respectively that the MIDI channel is ignored. If in doubt, the right setting is "Omni".

[MIDI ⦿Out ⦿Thru] determines whether the MIDI Output is used as MIDI Out or MIDI Thru. If you want to read the settings from the Remote WahWah, it must be set to "⦿Out". If you want to control another MIDI device after the Remote WahWah, the connector must be configured as "⦿Thru".

Disable Time | Latch Top Bot

This feature is only available when the [▣Auto Enable] function is active (see chapter 7.2.1). The [Disable Time] determines how many seconds the expression pedal can remain unmoved before the WahWah jumps back to bypass. When set to "Never", the WahWah doesn't turn off automatically, but by a preset change or an Instant Access switch (CC 74).

If the [Latch ▣Top] or [Latch ▣Bot] feature is enabled, the Auto Enable function switches on or off only when the expression pedal is at its top or bottom position. Thus, this function is a virtual switch (from WahWah firmware version 1.50).

Auto Wah - Tap CC No

The Remote WahWah has an Auto Wah function (see chapter 7.2.2). That is, the WahWah makes the movement itself, even without a connected expression pedal. The speed of the Auto Wah can be tapped. This means that you "knock" on a button of the MIDI foot controller several times acording to the beat. Thus the Remote WahWah learns the song tempo and the effect moves at this speed.

[Tap CC No.] must be set to the Control Change number the foot controller sends for the tap command.

Auto Wah - Time (ms)

[Time (ms)] is the time, the Auto Wah takes for a complete cycle of the effect movement. The two pull-down menus make up the time in milliseconds. If you set, for example, in the left panel "10" and right "00", this corresponds to a time of 1000 ms = 1 second. The values can be set from 40ms to 5000ms (= 5 seconds).

After powering the Remote WahWah, this time is used for the Auto Wah function. With the tap command, the time can be overwritten any time.

7.2 Preset Related Parameters

The following parameters can be set individually for each preset. We recommend to experiment a bit with all the parameters to understand their function. With the Remote WahWah, you can produce effects that differ quite a lot from a standard WahWah.

When adjusting the knobs and buttons, the settings in the Remote WahWah are temporarily overridden. To keep the changes permanently, you need to confirm the new settings with the button [Store Preset]. Otherwise they will be lost at preset change.

7.2.1 Basic Operation

Bypassed | On

The Remote WahWah has a true-bypass. This means that in [⦿Bypassed] mode, the signal goes directly from the input jack to the output jack without affecting the signal in any way.

Auto Enable

If this feature is active, the WahWah is basically set to "Bypass". Once the expression pedal is moved, the WahWah turns on. If the expression pedal is not moved during a predefined time (see [Disable Time] in chapter 7.1), the WahWah switches back to "Bypass" automatically.

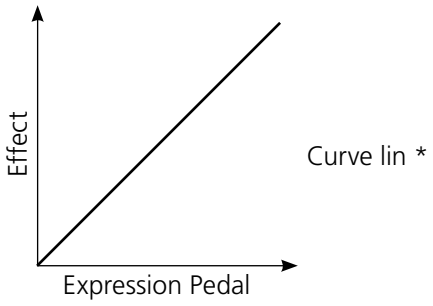
WahWah | Volume (VCA)

Sets whether the effects unit is used as a WahWah or as a volume pedal in this preset. Depending on the selected function, not all following parameters are available.

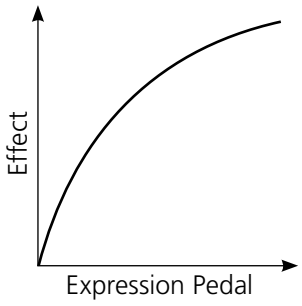
Curve lin | log

This setting determines how the Remote WahWah responds to the expression pedal. It affects how the Remote WahWah "feels under the foot": linear or logarithmic. Technically, it is about the frequency of the effect in the middle area of the control path (operating mode "WahWah") or the volume level respectively (operating mode "Volume").

Depending on the effect, for one preset [⦿lin] may be more pleasant, while with a different preset, [⦿log] might feel better. For example: using a volume preset with [Lowest Value] of "-99.9dB" (mute), probably [⦿log] is more pleasant. While a slight volume reduction with [Lowest Value] at "-20dB", [⦿lin] would be very enjoyable. Try it!



Curve lin *



Curve log *

Lowest Value (only operation mode [⦿Volume])

This setting determines how loud the volume pedal is in the lower stop (MIDI position 0). The values range from -99.9 dB (mute) to 0. If set to 0, however, the expression pedal is ineffective. With the setting 0, you can create a line driver (buffer amp) preset with fix gain.

If, for example, the value is set to -20dB, the volume pedal does not range from unity gain to mute, but reduces the volume just a little bit.

Initial Position | Do Not Change

The [Initial Position] value determines the position of the effect when you recall a preset. It thus determines the frequency of the WahWah effect (operating mode "WahWah") or the volume (operating mode "Volume") when you recall the preset.

If [▣ Do Not Change] is selected, [Initial Position] setting is ignored. The position of the WahWah, respectively the volume, remains unchanged when recalling a preset. This means, it will be overtaken from the old preset. However, this only works when switching from one "Volume" to another "Volume" preset, or from one "WahWah" to another "WahWah" preset. This feature makes sense if you, for example, switch from a normal volume preset to a solo Boost preset. With active [▣ Do Not Change] function there are no volume jumps at preset changes. The volume only changes when the pedal is moved.

When switching between WahWah and volume presets, [▣ Do Not Change] is ignored and the value of [Initial Position] will be used.

If you want to program a "Mute" preset, [▣ Do Not Change] must be disabled so that the WahWah switches to "Mute" when recalling the preset.

IMPORTANT => After a new preset is loaded, the position of the WahWah effect, or the volume respectively, usually does not match the position of the expression pedal. The Remote WahWah, therefore, has a latching function. That is, after recalling a preset, the expression pedal must "run over" the current value where the Remote WahWah is acoustically. Once the position of the expression pedal matches the effect position, the Remote WahWah latches and from now on follows the movement of the expression pedal.

This has the great advantage that the effect does not jump when the expression pedal is moved for the first time after a preset change. When this function is out of range, the pedal latches onto the upper or lower dead stop of the expression pedal. This can result in level jumps.

Output Gain

[Output Gain] adjusts the output volume without influencing the WahWah sound. On the one hand, it allows you to compensate the volume, which drops through the WahWah effect. On the other hand, [Output Gain] can also be used as a booster (0 to 31.25 dB).

* The factory preset curves for [⦿lin] [⦿log] can be changed. Please contact Prostage for more information.

7.2.2 The WahWah

WahWah

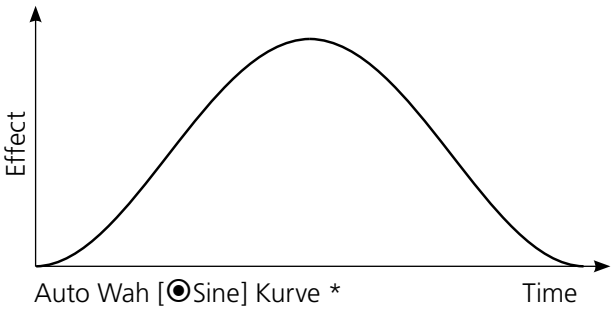
The WahWah effect can be activated or disabled. If both, WahWah and Contour Boost are disabled, the device works as a Treble booster. In this case, [Output Gain] is used as a boost.

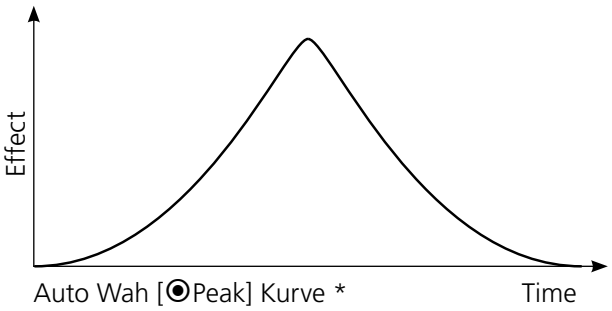
Auto Wah | Sine / Peak

If the [▣Auto Wah] function is active, the Remote WahWah makes the effect movement independently, without having to move an expression pedal. The speed of the effect is determined by the value [Auto Wah - Time], or by the tap command respectively (see chapter 7.1).

To use the [▣Auto Wah] function, [▣Auto Enable] must be switched off (please do not mix [▣Auto Enable] and [▣Auto Wah]. These are two very different things).

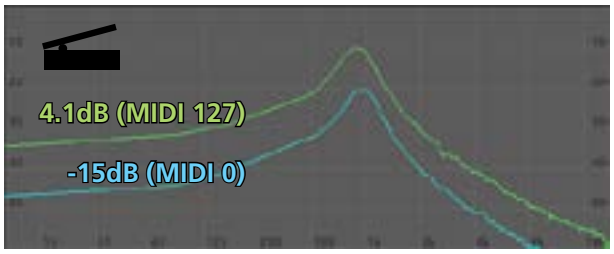
The settings [⦿Sine] or [⦿Peak] selects the curve of this automatic movement:

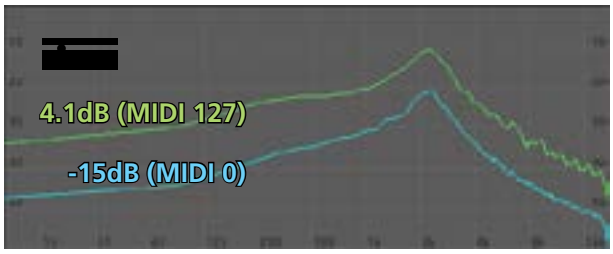




Input Gain

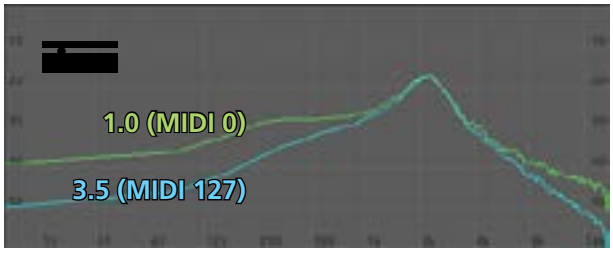
[Input Gain] adjusts the input gain of the WahWah effect. This value influences the drive of the Fasel coil. At high levels, a compression effect will occur.





Q-Factor

The Q factor is the width of the WahWah filter. Low values result in a wide WahWah sound with only slightly lowered bass and treble. High values give a thin sound with strongly reduced bass and treble.



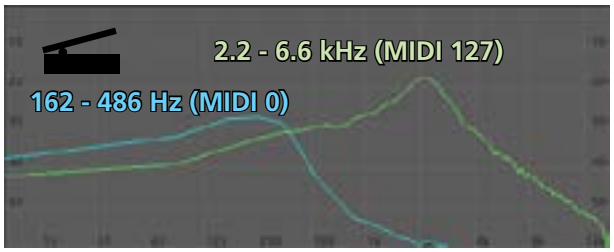
* The factory preset curves for [⦿Sine] and [⦿Peak] can be changed. Please contact Prostage for more information.

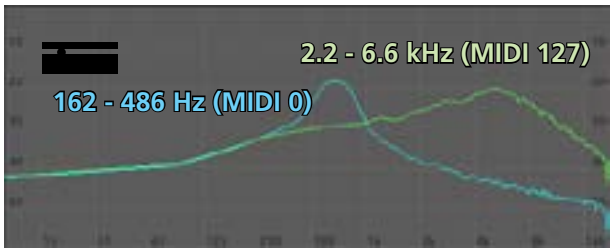
Coil Damping

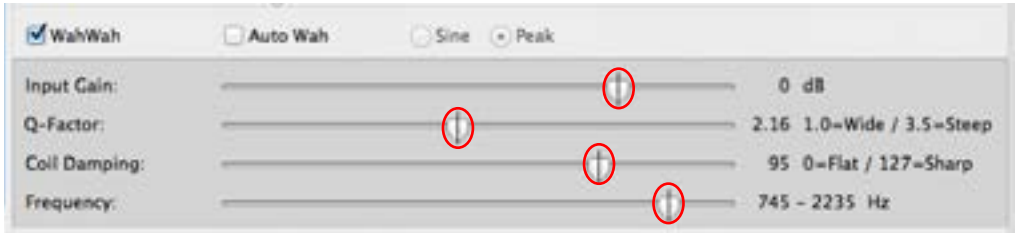
[Coil Damping] controls the rating of the Fasel coil. Small values produce a flat effect. High values result in a sharp WahWah effect.

Frequency (WahWah)

Controls the basic frequency of the WahWah effect.

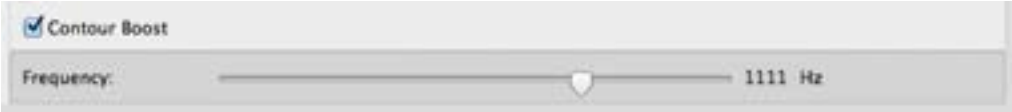






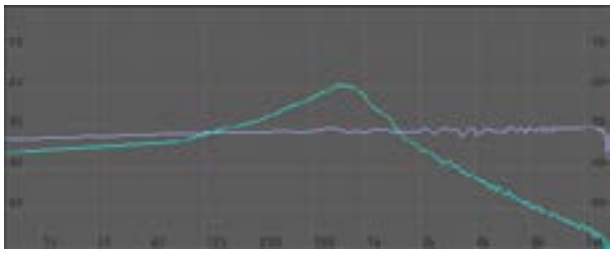
NOTE => The marks of the four WahWah parameters show the settings for the Cry Baby.

7.2.3 Contour Boost



Contour Boost

Contour Boost is an increase of the mid-range and lowers the heights. The Contour Boost can be used with the WahWah, or as a boost without the WahWah effect, e.g. for a solo sound. If both, WahWah and Contour Boost, are disabled, the device works as a Treble Booster.



Input Signal

Contour Boost 10 dB

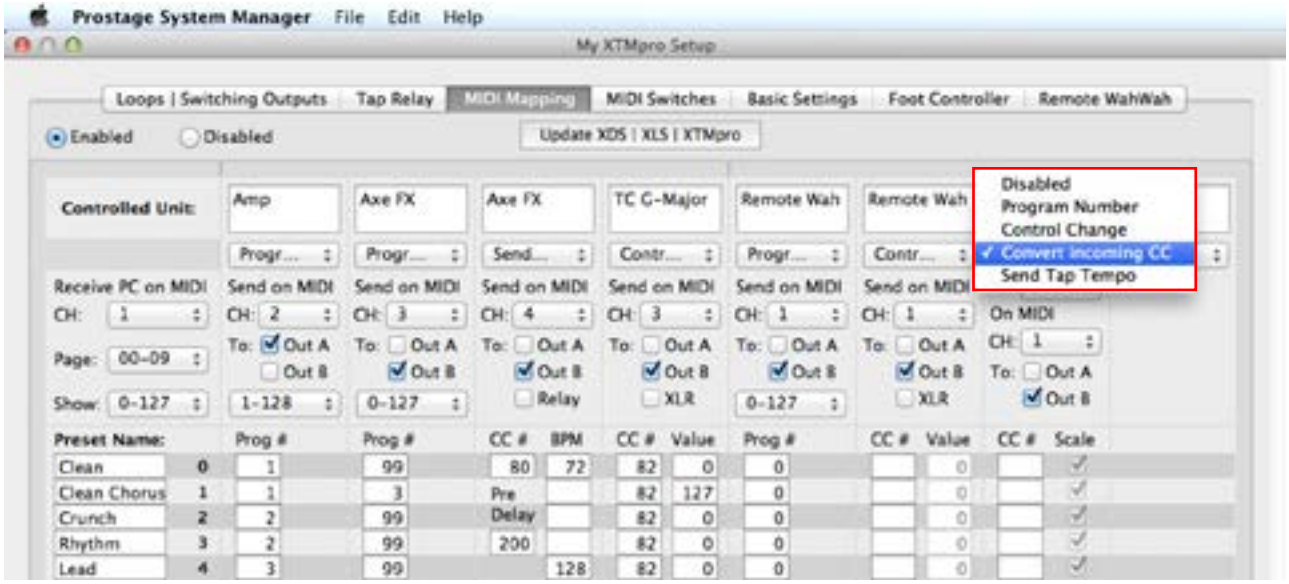
Frequency (Contour Boost)

Adjusts the frequency of the Contour Boost.

7.3 Practice Hint

All parameters can be controlled with MIDI Control Change commands (see chapter 6.1). If the expression pedal sends e.g. CC No. 95 instead of CC No. 7, moving the pedal will change the Contour Boost frequency instead of controlling the WahWah effect. This way, you can generate completely new effects. Some experimenting is worth it!

The XDS | XLS | XTMpro can map and scale Control Change commands generated by the expression pedal. This means that you can control a different parameter of the Remote WahWah on each preset. It is even possible to control multiple parameters in parallel (with each other or against each other). See chapter 7.5 of the PurpleLine users manual for more information.

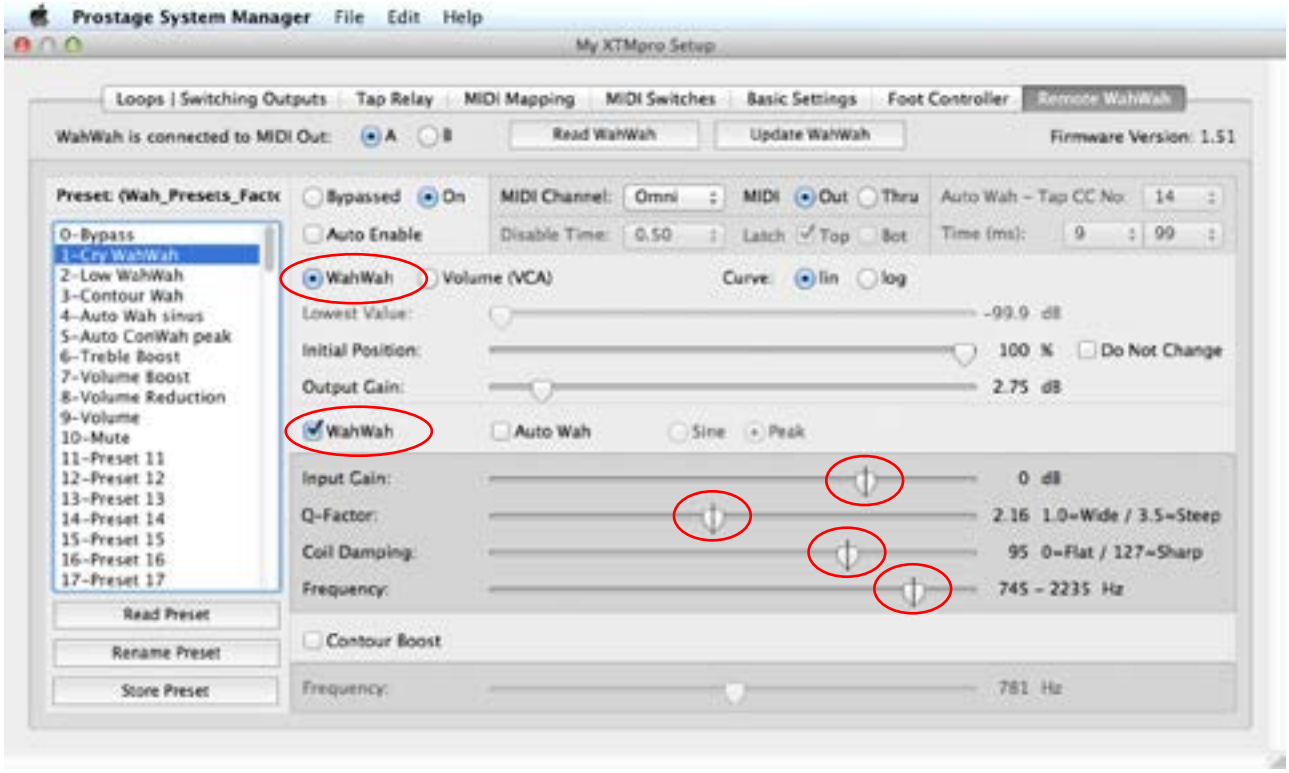


8 Examples

The following examples correspond to the factory presets of the Remote WahWah.

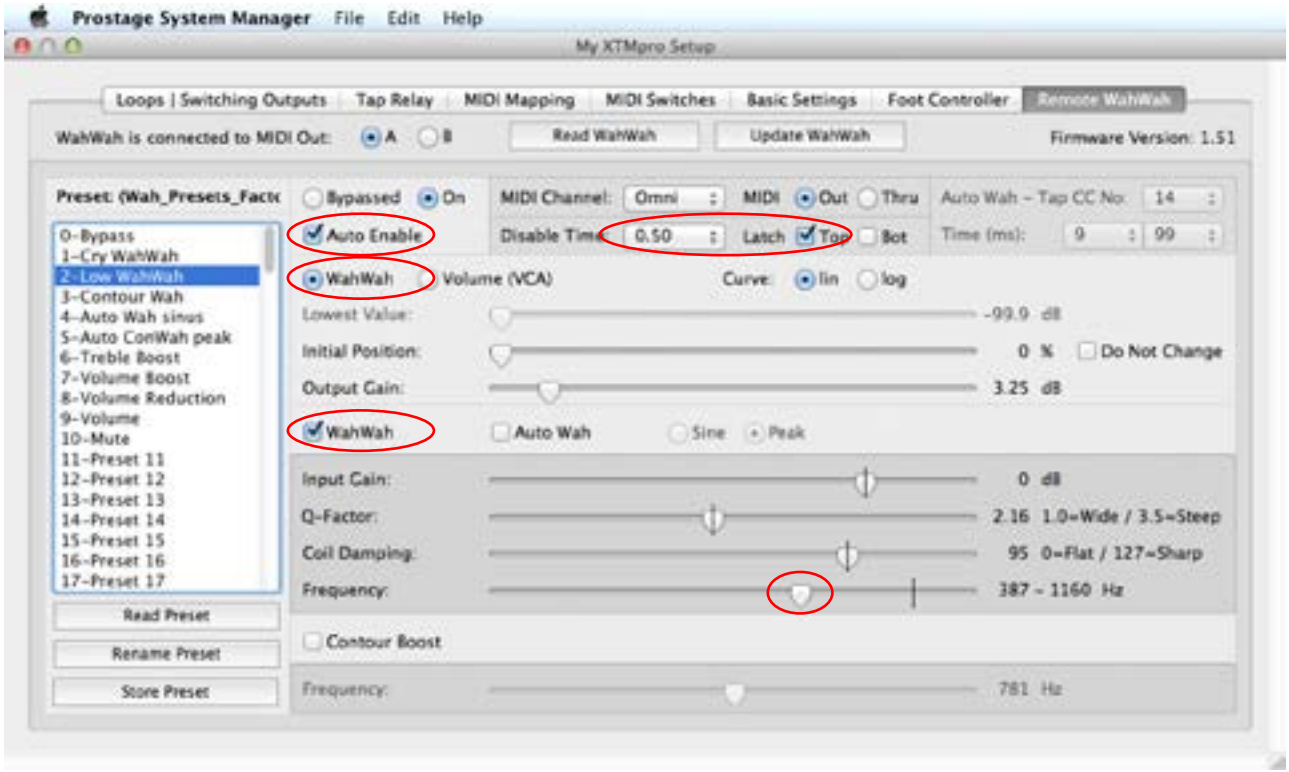
8.1 WahWah

Standard WahWah; corresponds to the Cry Baby.



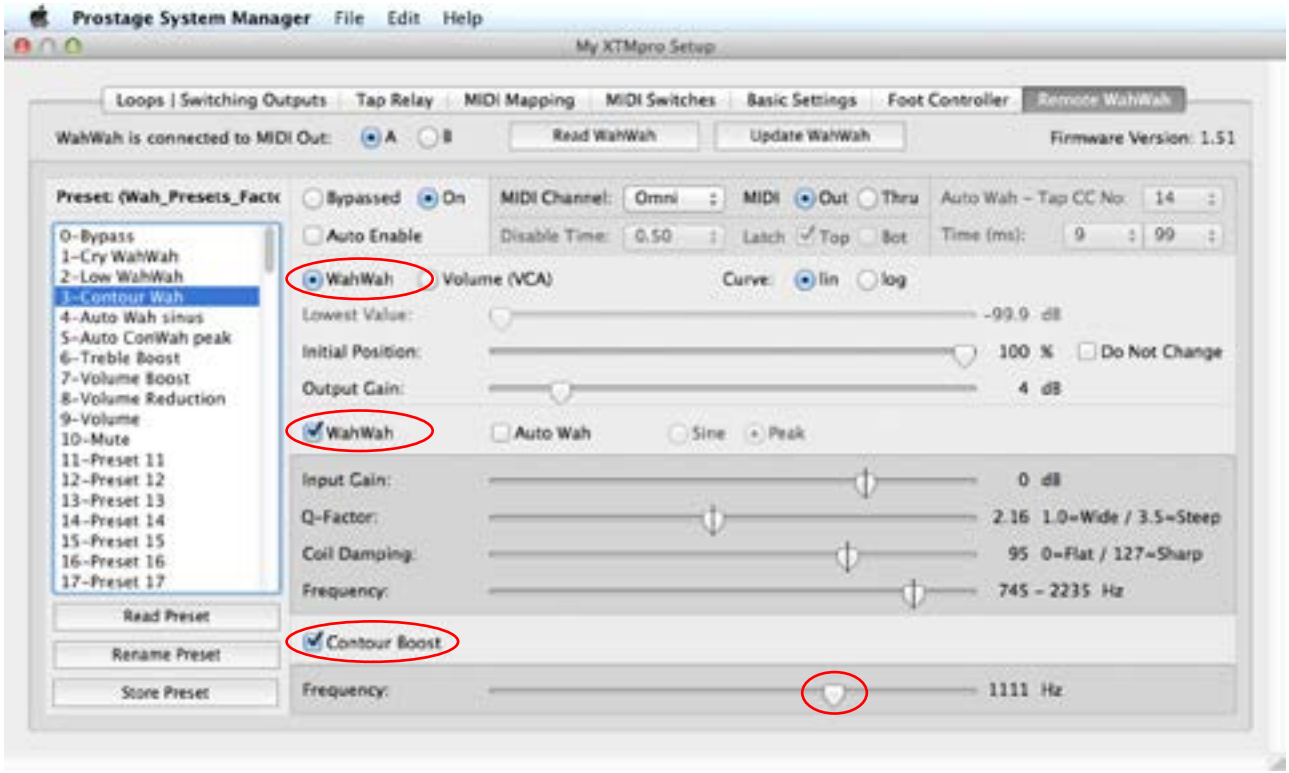
8.2 Low Wah

WahWah with slightly lower effect frequency. The WahWah enables as soon as the expression pedal reaches its top position [▣Auto Enable] and [▣Top].



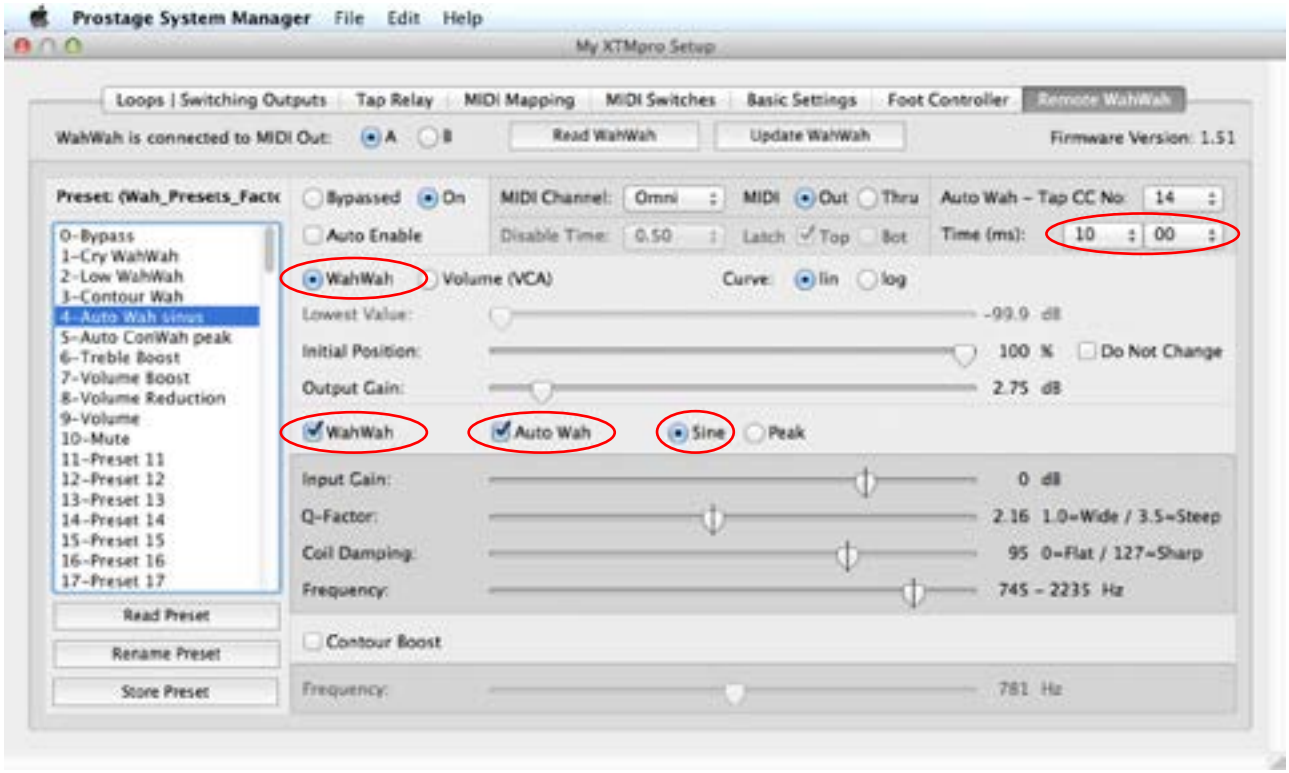
8.3 Contour Wah

WahWah with Contour Boost



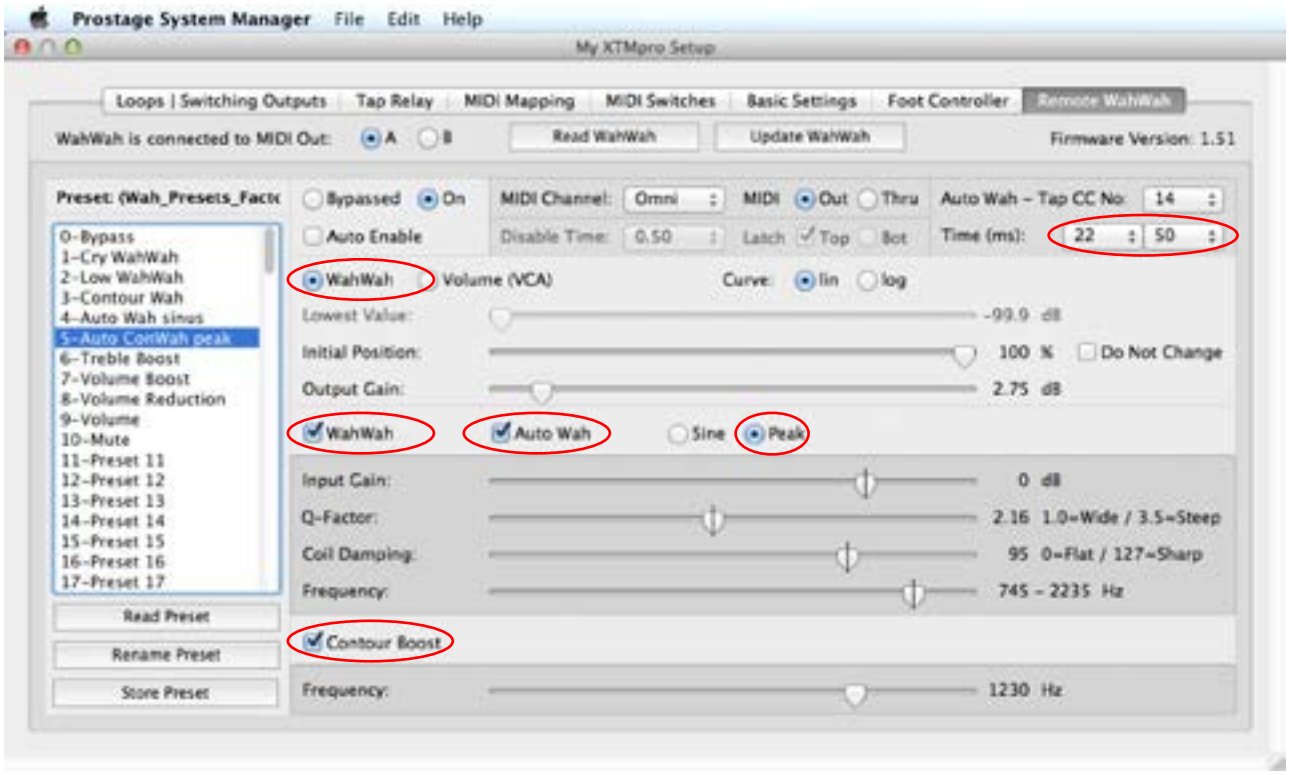
8.4 Auto Wah Sinus

WahWah with [▣Auto Wah]-function. The motion of the WahWah uses the [⦿Sine] curve and the time for a complete cycle (up and down) is set to 1 second (= 1000 ms).



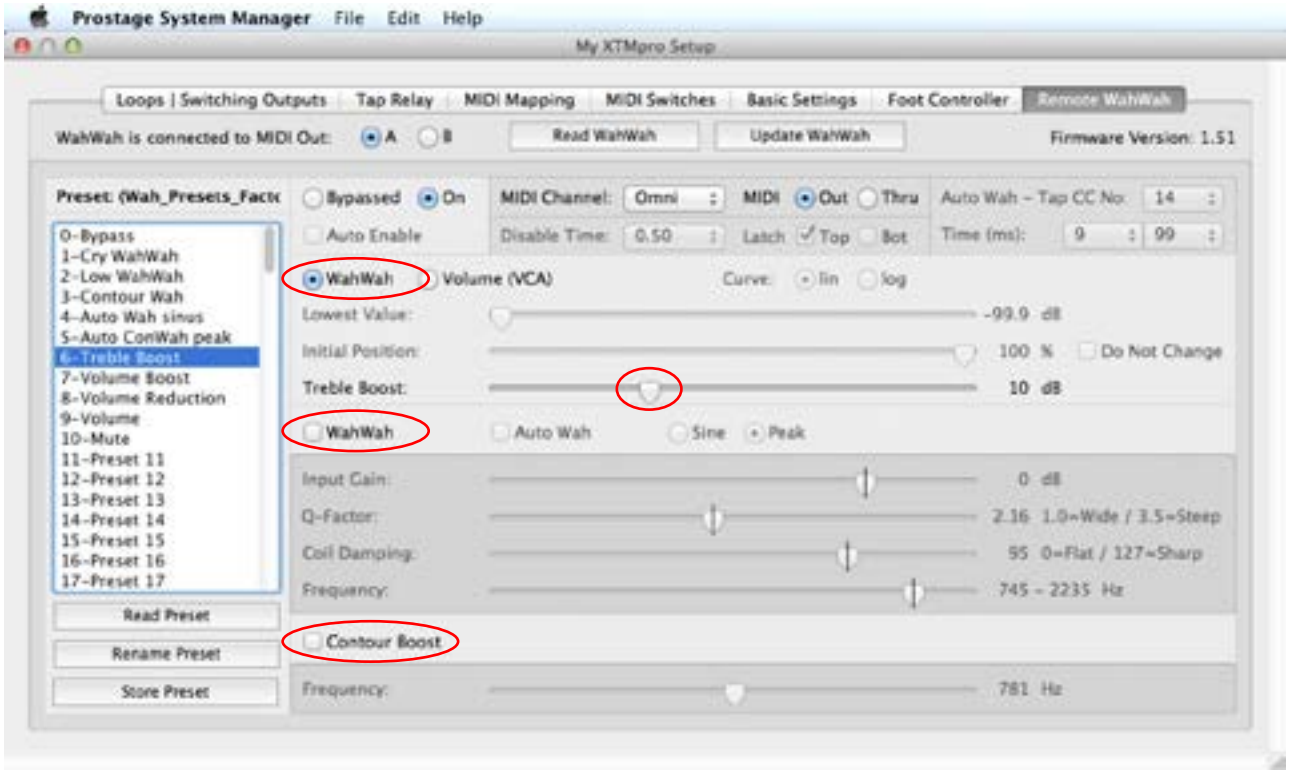
8.5 Auto Wah Peak

WahWah with [▣Contour Boost] and [▣Auto Wah] function. The motion of the WahWah uses the [⦿Peak] curve. The time for a complete cycle (up and down) is set to 2,25 seconds (2250 ms).



8.6 Treble Booster

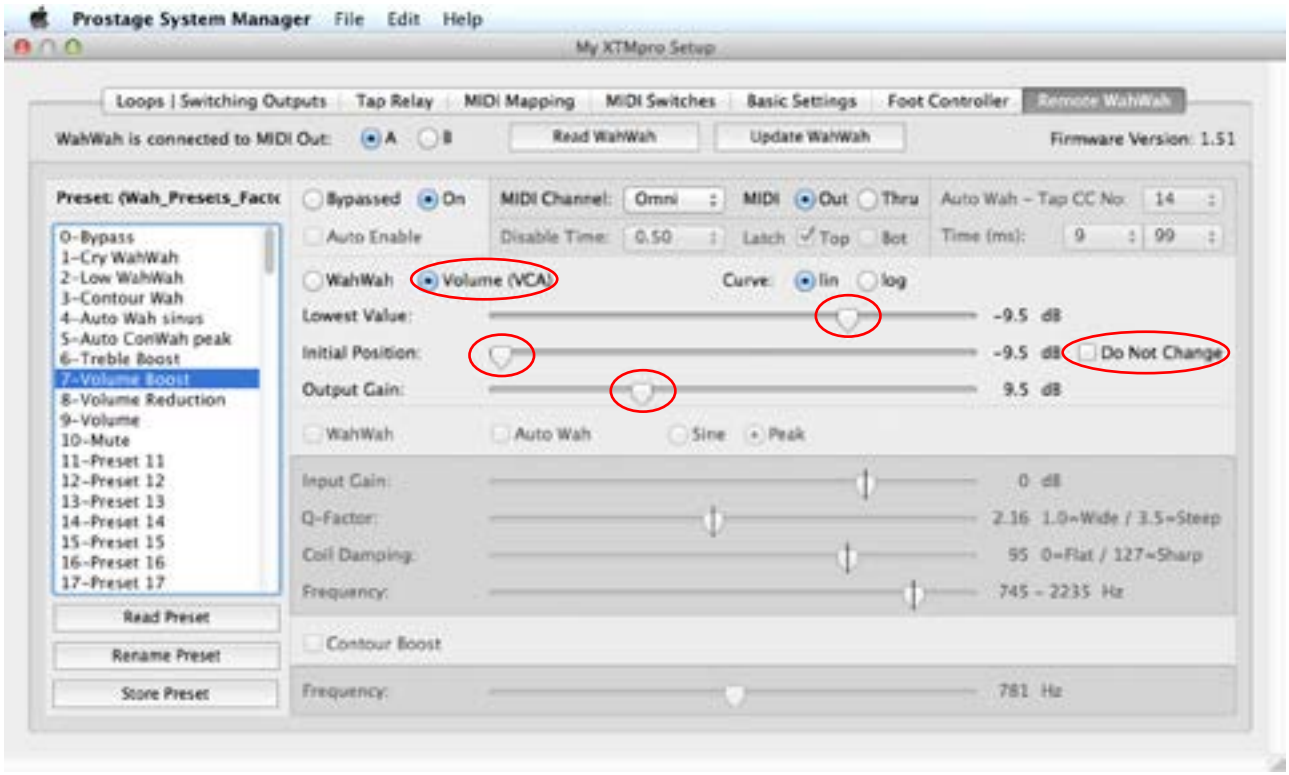
In order to enable the Treble Booster, the [▣WahWah] and [▣Contour Boost] must be disabled. The boost is adjusted by the Output Gain slider, which will be renamed to [Treble Boost]. The expression pedal is not used in this preset.



8.7 Volume Boost

Volume Boost of 9.5 dB. The pedal moves between 0 dB (unity gain) and 9.5 dB boost. [▣ Do Not Change] is disabled so that the VCA will jump to -9.5 dB at the preset change, thus compensating the output gain. This means that the volume is at 0 dB (unity gain) when changing the preset.

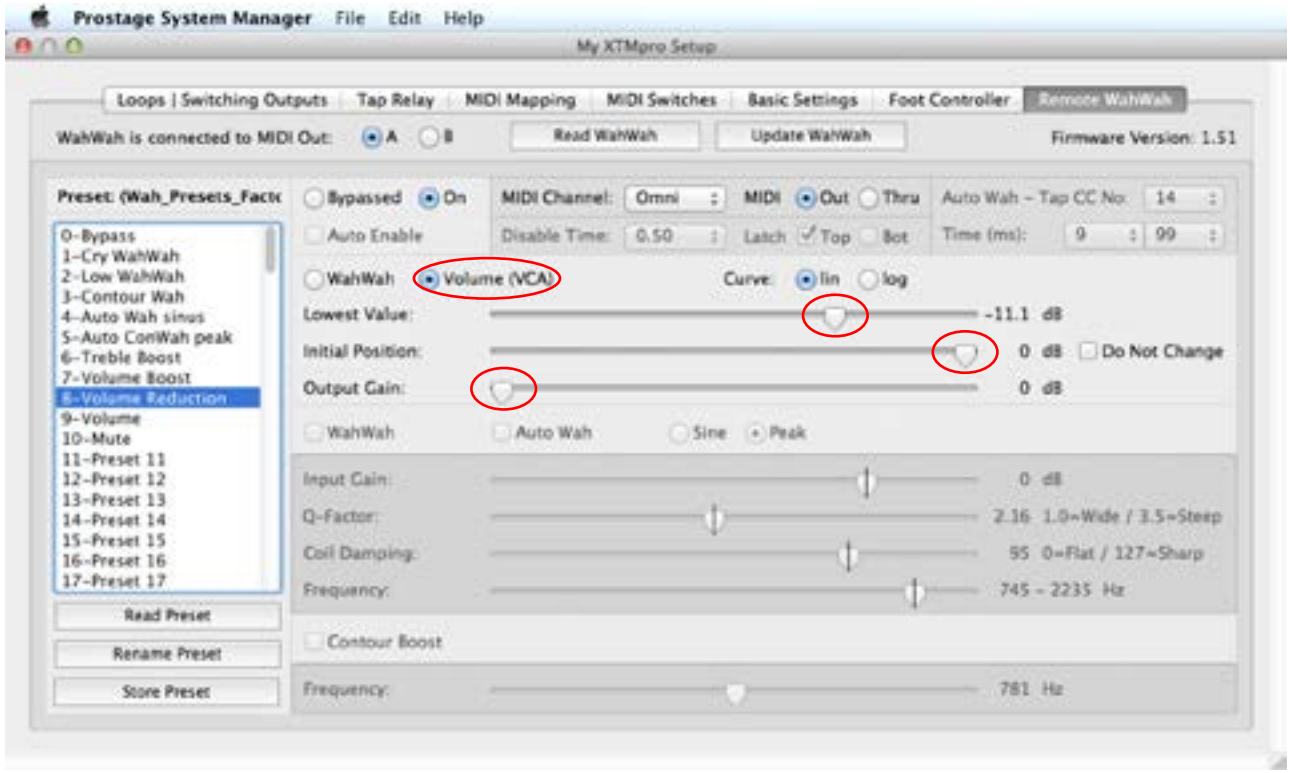
0 dB + 9.5 dB



8.8 Volume Reduction

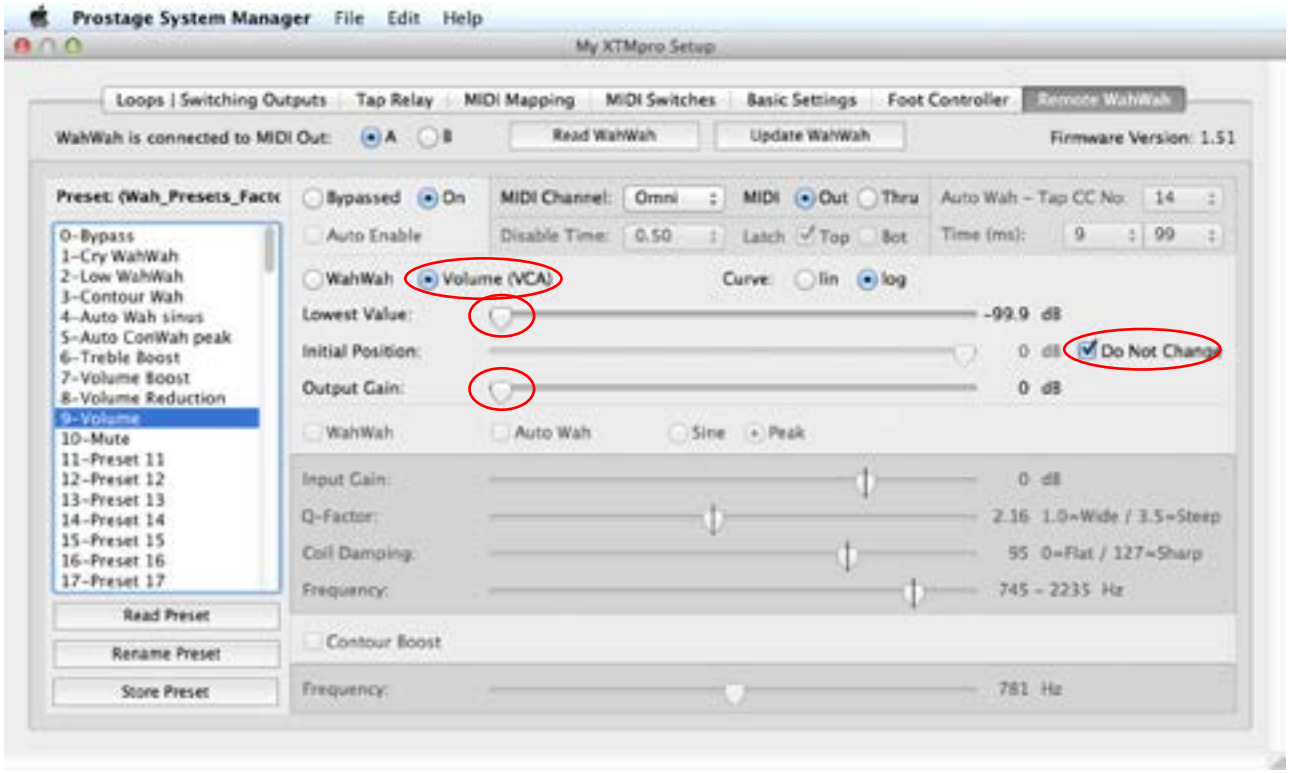
Volume reduction of 11 dB. The volume will jump to 0db (unity gain) when recalling the preset. The pedal moves between -11 dB and 0dB (unity gain).

-11 dB 0 dB



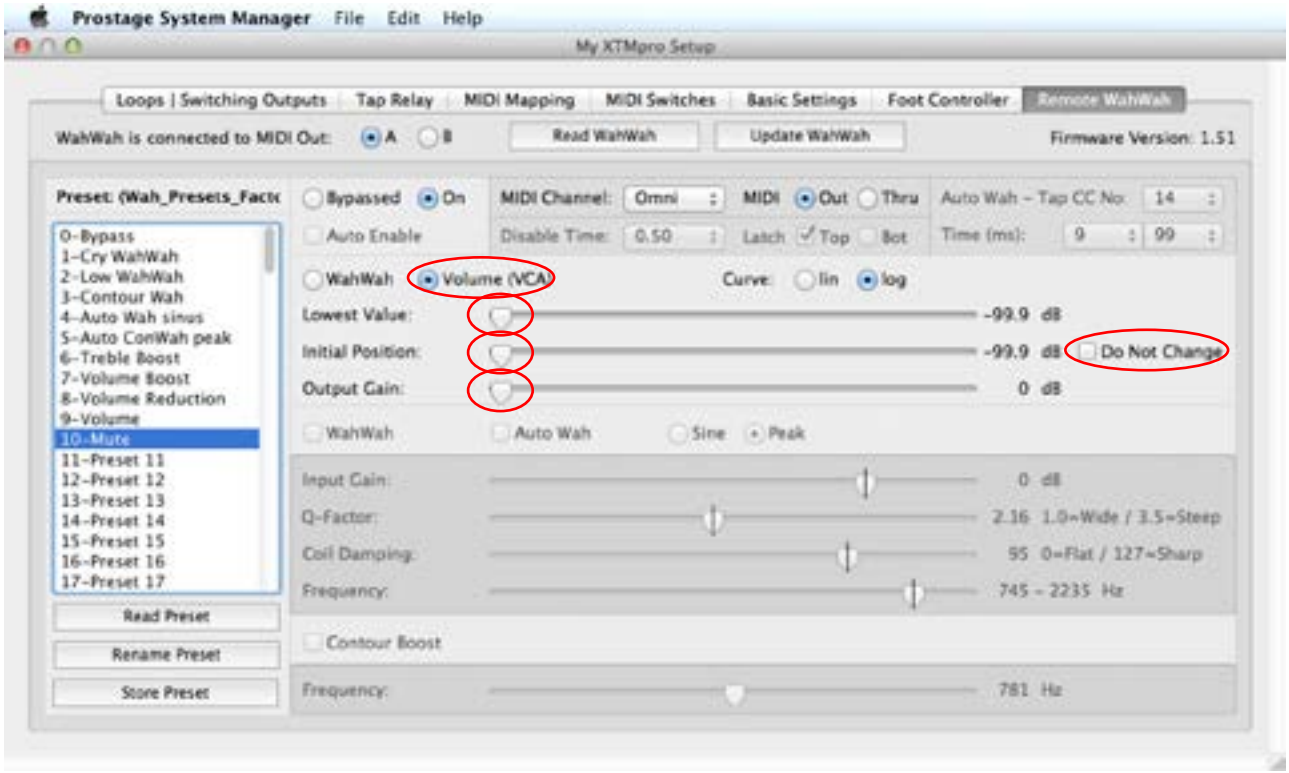
8.9 Volume Pedal

Normal volume pedal, mute to 0dB. The volume will not change when recalling the preset.



8.10 Mute

For the Mute function, all three sliders (Lowest Value, Initial Position and Output Gain) have to be in the left end position. [▣ Do Not Change] must be disabled.



9 Warning Instructions and Warranty

9.1 Warnings and Safety Instructions

For reasons of the product liability, we are obligated to make clear certain safety aspects which must not be ignored under any circumstances. The devices must **not be stored or operated in damp or wet environment**. The Remote WahWah may only be operated with **9V~AC**.

The device serves as an audio effects processor and may be used for this purpose exclusively.

The equipment may be opened by qualified technical personnel only. There are no user serviceable parts inside the devices.

In order to avoid damages, you should be careful when transporting and setting up the device. Please **avoid strong variations in temperature.** Particularly the change from the cold transport vehicle to the, usually warm, stage can cause condensing humidity, which can cause leaks and thus can evoke defects. Usually, 60 minutes are sufficient to equalize the temperature. For transportation, always carry the devices in a robust packing or rack, especially if you change your place of work frequently.

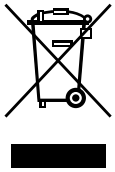
No containers filled with liquid may be placed on the equipment!

9.2 Warranty / Support

All Prostage PurpleLine units are covered by a 2-year warranty. Prostage shall not be liable if the damage was caused by inappropriate use or if the units are not connected as described in this users manual. There are no user serviceable parts inside the unit. The detailed terms of the warranty can be downloaded from the Prostage website.

If you need technical support, please contact your local dealer or email to info@prostage.eu

9.3 Disposal of Old Devices



The PurpleLine products are subject to the European guideline 2002/96/EC. All old electric and electronic devices must be disposed separately from the domestic waste, using the collection points provided by the government. The devices may not be disposed with domestic or skip refuse. Information about collecting points or collection dates, can be asked from the local administration or the local waste management company.
Please also carry the packing to an environmentally fair disposal. Cardboard boxes can be transferred with waste-paper collections or to the public collecting stations for recycling. Foils of the shipment are collected by the local waste management company and are forwarded to environmentally fair disposal.

10 Declaration of Conformity

Company: Prostage SL
Apdo 57
ES-07560 Cala Millor

Type of Equipment: PurpleLine System

Trademarks: Prostage / StageWire

Models: Remote WAHWAH, Remote Volume (VCA)

The products meet the requirements of the following standards:

EMC: EN 55103-2 | EN 55103-1:2009 | EN 55103-2:2009
EN 61000-3-2
EN 61000-4-2 | EN 61000-4-3 | EN 61000-4-4 | EN 61000-4-5 | EN 61000-4-3 | EN 61000-4-11
Safety: IEC 60065:2001 | EN 60065:2002 / A1:2006 / Cor.:2007 / A11:2008

Jahr: 2011

Cala Millor, 14. Dezember 2011 Lukas Truninger, CEO

Information to the user:

Class B Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

11 Apendix A | MIDI Implementation Cart

Manufacturer: Prostage **Model:** Remote WahWah **Date:** January, 2014			
	Transmit/ Export	Recognize/ Import	Remarks
1. Basic Information			
MIDI Channels	No	1-16	Channel 1 is set by default
Note Numbers	No	No	
Program Change	No	0 - 127	
Bank Select Response	No	No	
Note-On Velocity	No	No	
Note-Off Velocity	No	No	
Channel Aftertouch	No	No	
Poly (Key) Aftertouch	No	No	
Pitch Bend	No	Yes	
StageWire Instant Acces Switches	No	No	Prostage unique feature
Active Sensing	No	No	
System Reset	No	No	
Tune Request	No	No	
Universal System Exclusive	No	No	
Manufacturer System Exclusive	Yes	Yes	Manuf. ID: 00 20 75
NRPNs	No	No	
2. MIDI Timing and Synchronization			
MIDI Clock	No	No	
Song Position Pointer	No	No	
Song Select	No	No	
Start	No	No	
Continue	No	No	
Stop	No	No	
MIDI Time Code	No	No	
MIDI Machine Control	No	No	
MIDI Show Control	No	No	
3. Extensions Compatibility			
General MIDI compatible	No	No	
DLS compatible	No	No	
Standard MIDI Files	No	No	
XMF Files	No	No	
SP-MIDI compatible	No	No	

Control Number Information				
Control #	Function	Transmited	Recognized	Remarks
0	Bank Select (MSB)	No	No	
1	Modulation Wheel (MSB)	No	No	
2	Breath Controller (MSB)	No	No	
3	Undefined	No	No	
4	Foot Pedal (MSB)	No	No	
5	Portamento Time (MSB)	No	No	
6	Data Entry (MSB)	No	No	
7	Volume	No	0 - 127	Remote WahWah
8	Balance (MSB)	No	No	
9	Expression-Pedal	No	No	
10	Pan (MSB)	No	No	
11	Expression Controller (MSB)	No	No	
12	Effect Control 1 (MSB)	No	No	
13	Effect Control 2 (MSB)	No	No	
14	Tap (latching)	No	0 or 127	Auto Wah Speed
15	Tap (momentary)	No	No	
16	General Purpose Controller 1 (MSB)	No	No	
17	General Purpose Controller 2 (MSB)	No	No	
18	General Purpose Controller 3 (MSB)	No	No	
19	General Purpose Controller 4 (MSB)	No	No	
20	Undefined	No	No	
21	Undefined	No	No	
22	Undefined	No	No	
23	Undefined	No	No	
24	Undefined	No	No	
25	Undefined	No	No	
26	Undefined	No	No	
27	Undefined	No	No	
28	Undefined	No	No	
29	Undefined	No	No	
30	Undefined	No	No	
31	Undefined	No	No	
32	LSB for CC 00	No	No	
33	LSB for CC 01	No	No	
34	LSB for CC 02	No	No	
35	LSB for CC 03	No	No	
36	LSB for CC 04	No	No	
37	LSB for CC 05	No	No	
38	LSB for CC 06	No	No	
39	LSB for CC 07	No	No	
40	LSB for CC 08	No	No	
41	LSB for CC 09	No	No	
42	LSB for CC 10	No	No	
43	LSB for CC 11	No	No	
44	LSB for CC 12	No	No	
45	LSB for CC 13	No	No	
46	LSB for CC 14	No	No	
47	LSB for CC 15	No	No	
48	LSB for CC 16	No	No	
49	LSB for CC 17	No	No	
50	LSB for CC 18	No	No	
51	LSB for CC 19	No	No	
52	LSB for CC 20	No	No	
53	LSB for CC 21	No	No	
54	LSB for CC 22	No	No	
55	LSB for CC 23	No	No	
56	LSB for CC 24	No	No	
57	LSB for CC 25	No	No	
58	LSB for CC 26	No	No	
59	LSB for CC 27	No	No	
60	LSB for CC 28	No	No	
61	LSB for CC 29	No	No	
62	LSB for CC 30	No	No	
63	LSB for CC 31	No	No	

Control Number Information				
Control #	Function	Transmited	Recognized	Remarks
64	Sustain Pedal	No	No	
65	Portamento On/Off	No	No	
66	Sostenuto	No	No	
67	Soft Pedal	No	No	
68	Legato Footswitch	No	No	
69	Hold Pedal 2	No	No	
70	Sound Controller 1	No	No	
71	Sound Controller 2	No	No	
72	Sound Controller 3	No	0 or 127	Wah: Do Not Change
73	Sound Controller 4	No	0 or 127	Wah: Curve Select
74	Sound Controller 5	No	0 or 127	Wah: Bypass
75	Sound Controller 6	No	0 or 127	Wah: VCA / WahWah Mode
76	Sound Controller 7	No	0 or 127	Wah: Enable WahWah
77	Sound Controller 8	No	No	
78	Sound Controller 9	No	0 or 127	Wah: Enable Contour Boost
79	Sound Controller 10	No	0 or 127	Wah: Enable Auto Wah
80	General Purpose Controller 5	No	No	
81	General Purpose Controller 6	No	No	
82	General Purpose Controller 7	No	No	
83	General Purpose Controller 8	No	No	
84	Portamento Control	No	No	
85	Undefined	No	No	
86	Undefined	No	No	
87	Undefined	No	No	
88	Undefined	No	No	
89	Undefined	No	0 - 127	Wah: Lowest VCA Value
90	Undefined	No	0 - 127	Wah: Input Gain
91	Effects 1 Depth	No	0 - 127	Wah: Q Factor
92	Effects 2 Depth	No	0 - 127	Wah: Coil Rating
93	Effects 3 Depth	No	0 - 127	Wah: Frequency
94	Effects 4 Depth	No	0 - 127	Wah: Contour Boost Frequency
95	Effects 5 Depth	No	0 - 127	Wah: Output Gain
96	Data Increment	No	No	
97	Data Decrement	No	No	
98	Non-Registered Parameter Number (LSB)	No	No	
99	Non-Registered Parameter Number (MSB)	No	No	
100	Registered Parameter Number (LSB)	No	No	
101	Registered Parameter Number (MSB)	No	No	
102	Undefined	No	No	
103	Undefined	No	No	
104	Undefined	No	No	
105	Undefined	No	No	
106	Undefined	No	No	
107	Undefined	No	No	
108	Undefined	No	No	
109	Undefined	No	No	
110	Undefined	No	No	
111	Undefined	No	No	
112	Undefined	No	No	
113	Undefined	No	No	
114	Undefined	No	No	
115	Undefined	No	No	
116	Undefined	No	No	
117	Undefined	No	No	
118	Undefined	No	No	
119	Undefined	No	No	
120	All Sound Off	No	No	
121	Reset All Controllers	No	No	
122	Local Control On/Off	No	No	
123	All Notes Off	No	No	
124	Omni Mode Off	No	No	
125	Omni Mode On	No	No	
126	Poly Mode Off	No	No	
127	Poly Mode On	No	No	

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